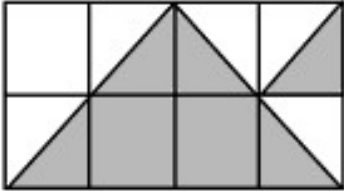
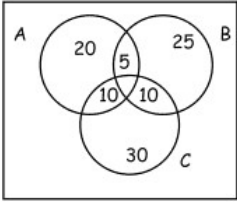


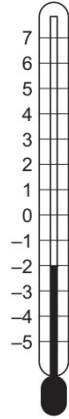
MOCK TEST 1

Student's name:

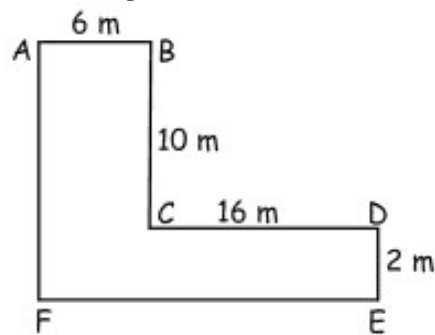
Parent's phone number:

Problem	Your answer
<p>P1. What is starting number?</p> <div style="text-align: center;"> <pre> graph TD A((?)) --> B[Multiply by 0.5] B --> C[Multiply by 1/3] C --> D[Square the number] D --> E[Add 1] E --> F[50] </pre> </div>	
<p>P2. Alice is thinking a four-digit number.</p> <ul style="list-style-type: none"> • The fourth digit is thrice the first digit. • The second digit is the second multiple of 2. • The third digit is the smallest even number. <p>Find the number.</p>	
<p>P3. Find the value of x: $3\frac{1}{4} + 6\frac{1}{4} + x = 10\frac{1}{10}$</p>	
<p>P4. Which one of the following is equal to 17?</p> <p>(A): $3 - 4 \times 5 + 6$ (B) $3 \times 4 + 5 : 6$ (C) $3 + 4 \times 5 - 6$ (D) $3 : 4 + 5 - 6$ (E) $3 \times 4 : 5 + 6$</p>	
<p>P5. Circle the point on the number line represents $\frac{17}{10}$</p> <div style="text-align: center;"> </div>	

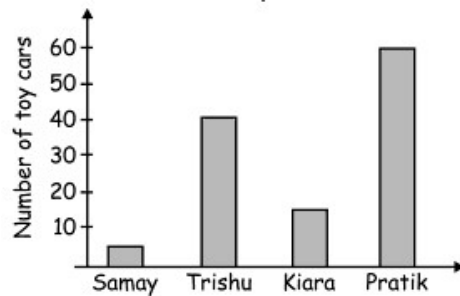
<p>P6. There are 18 pupils in a group. There are 10 boys and the rest are girls. 7 pupils are wearing glasses. If 3 girls are wearing glasses, how many boys are not wearing glasses?</p>	
<p>P7. Round 106.5 to the nearest whole number.</p>	
<p>P8. A baker buys 5 kg of flour and 3.5 kg of sugar for the cake and uses 2.25 kg of flour and 1.75 kg of sugar in the cake. What is the total amount of flour and sugar left with him?</p>	
<p>P9. What percentage of the shape is shaded?</p> 	
<p>P10. What is the value of $162 + 1620 + 6201 + 2016 = ?$</p>	
<p>P11. A group of 100 students were asked which hobby do they like. The venn diagram shows the data.</p>  <p style="text-align: center;">A → Music B → Dance C → Dramatics</p> <p>What is the ratio of number of students who like both music and dance but not dramatics to the number of students who like only dramatics?</p>	
<p>P12. What temperature is shown on the thermomenter?</p>	



P13. Find the area of the figure.

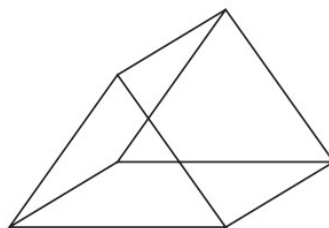


P14. The given graph shows the number of toy cars some children have.



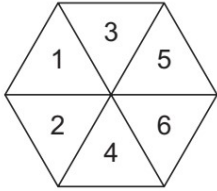
Who has thrice as many toy cars as the total number of toy cars Samay and Kiara have?

P15. Look at this 3D shape.



How many rectangular faces does it have?

P16. Jon has a spinner with 6 numbers. He records how many times the spinner lands on each number.



Number on the spinner	1	2	3	4	5	6
How many times	11	7	8	10	5	9

Which number did the spinner land on the least number of times?

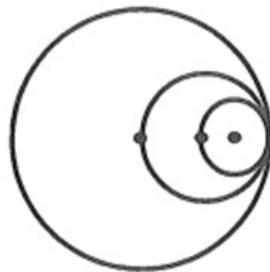
P17. The odometer of a car shows 165749. Note that all the digits of this number are different. At least how many more kilometers must be driven so that the car again will have all different digits in its odometer?

- (A) 28 (B) 30 (C) 31 (D) 33

P18. Serina's baby sister weighed 18 kg when she was 3 years old. Since then her weight has increased by 5%. What is her weight now?

P19. How many positive two-digit whole numbers are divisible by 7?

P20. There are three circles:



A: The largest

B: The middle size

C: The smallest

Circle A has a diameter of 10 cm. The smaller circles are drawn so that the radius of circle A is the diameter of circle B, and the radius of circle B is the diameter of circle C.

What is the area of circle C?

(Uses 3.14 for π and round your answer to the nearest tenth.)

P21. What number should go in the Δ in the table?

A	2	3	5	7	9	10
B	5	7	11	15	○	△

P22. Which of the following is a square AND a cube number?

4 8 9 27 64

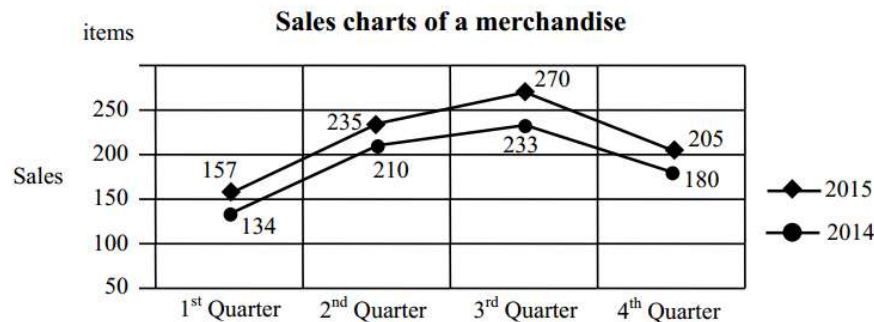
P23. The school inspector checks the attendance records and discovers that Marcus has only been at school for 80% of the time. If the school year has 190 days, how many school days has he missed? (1 week = 5 school days)

P24. A jug holds 1.5 litres of milk. How many millilitres of milk is this?

P25. In a park I can see people and dogs out for walk. I see 13 noses and 36 legs. How many tails are there in the park?

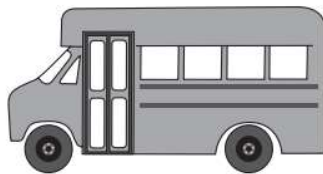
P26. If $4 \blacklozenge 2 = 36$ and $8 \blacklozenge 3 = 121$, find the value of $9 \blacklozenge 1$

P27. The chart below shows the sale figures of a certain merchandise in 2014 and 2015 by the season. How many more items were sold in 2015 than in 2014?



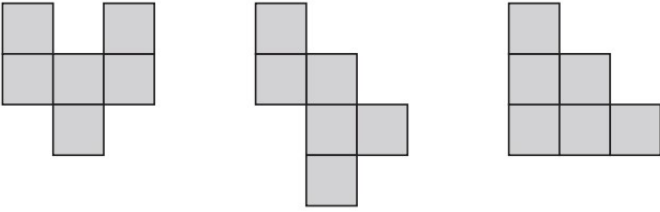
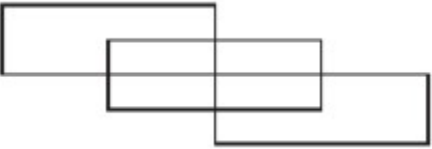
P28. Alex faces South. He turns clockwise by 3 right angles. Which direction does he face now?

P29. Maria's school has 160 children.



All 160 children travel on buses to get to school. Each bus carries 25 children. How many buses does the school need to carry all the children?

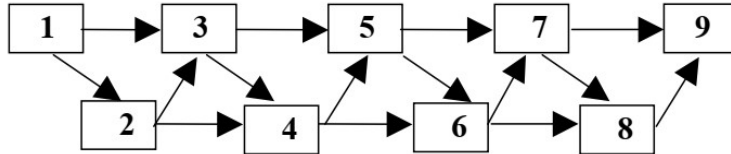
P30. Nicole draws 3 nets for a cube.

<p style="text-align: center;">Net A Net B Net C</p>  <p>Which net folds into a cube?</p>										
<p>P31. In the special square shown, the sum of the three numbers in each column equals the sum of the three numbers in each row. The value of x is</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td style="text-align: center;">13</td> <td style="text-align: center;">8</td> <td style="text-align: center;"> </td> </tr> <tr> <td style="text-align: center;">14</td> <td style="text-align: center;">x</td> <td style="text-align: center;">10</td> </tr> <tr> <td style="text-align: center;">9</td> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> </tr> </tbody> </table>	13	8		14	x	10	9			
13	8									
14	x	10								
9										
<p>P32. In the diagram shown, how many rectangles are there?</p> 										
<p>P33. A bicycle at Store P costs \$200. The regular price of the same bicycle at Store Q is 15% more than it is at Store P. The bicycle is on sale at Store Q for 10% off of the regular price. What is the sale price of the bicycle at Store Q?</p> <p>(A) \$230.00 (B) \$201.50 (C) \$199.00 (D) \$207.00 (E) \$210.00</p>										
<p>P34. Note that $2 \times 3 \times 4 \times 5 \times 10 = 1200$. This has two zero-digits. How many zero-digits are there in the product $20 \times 30 \times 40 \times 50 \times 100$?</p>										
<p>P35. Bob is 14 years old, and his sister Mary is half of that, i.e. 7 years old. How old will Bob be when Mary is 14 years old?</p>										
<p>P36. Anne had an average of exactly 88 after taking two tests. What score should she get on her third test so that the average of her three tests will be exactly 90?</p>										

P37. David wants to fill his swimming pool using two hoses. If he uses hose A alone, it will take 4 hours to fill the pool. If he uses hose B alone, it will take 6 hours. How long will it take to fill the pool if he uses both hose A and hose B at the same time.

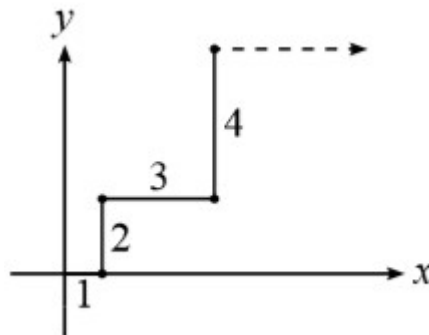
(A) 2.4 hours (B) 2.5 hours (C) 5 hours (D) 10 hours

P38. Always following the direction of the arrows, what is the number of distinct paths from 1 to 9?



P39. (Write your answer in detail)

On a coordinate grid, Paul draws a line segment of length 1 from the origin to the right, stopping at $(1,0)$. He then draws a line segment of length 2 up from this point, stopping at $(1,2)$. He continues to draw line segments to the right and up, increasing the length of the line segment he draws by 1 each time. One of his line segments stops at the point $(529,506)$. What is the endpoint of the next line segment that he draws?



P40. *(Write your answer in detail)*

The figure below shows a 12-sided regular polygon, which is called **DODECAGON**. How many diagonals can be drawn in it?

